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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/692,507

10/24/2003

Timothy S. Simpson

022082.0003US

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34284

7590

03/16/2010

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611 ANTON BLVD

SUITE 1400

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EXAMINER

SINGH, SUNIL

ART UNIT

PAPER NUMBER

3672

MAIL DATE

DELIVERY MODE

03/16/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/692,507	Applicant(s) SIMPSON ET AL.	
	Examiner Sunil Singh	Art Unit 3672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,7,11-13 and 15 is/are pending in the application.
- 4a) Of the above claim(s) 1 and 2 is/are withdrawn from consideration.
- 5) ☐ Claim(s) 4,5,7,11 is/are allowed.
- 6) ☒ Claim(s) 3,12,13,15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 3,4,5,7,11,12,13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 line 11, "such that the discharge rate" is incomplete.

Claim 4 line 4, "a upper" should be --an upper--;

Claim 13 calls for the discharge riser to have "a plurality of openings"; claim 4 calls for a discharge riser having "a plurality of holes"; it appears that they are the same; therefore they should be related.

Claim 13, "a outlet" should be --an outlet--.

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 3, 12,13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 3 calls for each baffle is sized or configured such than a discharge rate

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through an outlet remains substantially autonomous of the water depth. The specification clearly fails to enable one skilled in the art to make and/or use the invention as claimed. How is the flow rate autonomous of water depth? This is contrary to fluid mechanics. For example, $Q = AV$, wherein Q is the flow rate, A is the area of opening and V is the velocity. The velocity is directly related to h or water depth. Therefore, one skilled in the art cannot make and/or use the invention as claimed. It is not clear how the baffle sizing or configuration allows the discharge rate to be autonomous of the water depth. The discharge rate is $Q=AV$, wherein A is the area of opening and V is the velocity.

See pages 127-129 of Fundamentals of Fluid Mechanics.

Claim 12 calls for each baffle is sized or configured such than a discharge rate through an outlet remains substantially independent of the water depth. The specification clearly fails to enable one skilled in the art to make and/or use the invention as claimed. How is the flow rate independent of the water depth? This is contrary to fluid mechanics. For example, $Q = AV$, wherein Q is the flow rate, A is the area of opening and V is the velocity. The velocity is directly related to h of water depth. Therefore, one skilled in the art cannot make and/or use the invention as claimed. It is not clear how the baffle sizing or configuration allows the discharge rate to be independent of the water depth. The discharge rate is $Q=AV$, wherein A is the area of opening and V is the velocity.

Claim 13 calls for the discharge riser to having openings sized or position such that a discharge flow rate through a outlet remains substantially independent of the water

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depth. The specification clearly fails to enable one skilled in the art to make and/or use the invention as claimed. How is the flow rate independent of the water depth? This is contrary to fluid mechanics. For example, $Q = AV$, wherein Q is the flow rate, A is the area of opening and V is the velocity. The velocity is directly related to h of the water depth. Therefore, one skilled in the art cannot make and/or use the invention as claimed. It is unclear how to make and/or use a discharge riser having openings sized or positioned such that a discharge flow rate through an outlet remains substantially independent of the water depth.

5. Claim 15 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification does not enable one to make and/or use the invention as claimed. For example one is unable to make a riser that has openings sized or positioned such that a discharge rate through a outlet is controlled and complete settlement of suspended sediments is achieved.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. The disclosed invention is inoperative and therefore lacks utility. Claim 3 calls for each baffle is sized or configured such than a discharge rate through an outlet remains autonomous of the water depth. The specification clearly fails to enable one skilled in the art to make and/or use the invention as claimed. How is the flow rate autonomous to the water depth? This is contrary to fluid mechanics. For example, $Q = AV$, wherein Q is the flow rate, A is the area of opening and V is the velocity. The velocity is directly related to h or water depth. Therefore, one skilled in the art cannot make and/or use the invention as claimed. It is not clear how the baffle sizing or configuration allows the discharge rate to be autonomous of the water depth. The discharge rate is $Q=AV$, wherein A is the area of opening and V is the velocity.

Claim 12 calls for each baffle is sized or configured such than a discharge rate through an outlet remains substantially independent of the water depth. The specification clearly fails to enable one skilled in the art to make and/or use the invention as claimed. How is the flow rate independent of the water depth? This is contrary to fluid mechanics. For example, $Q = AV$, wherein Q is the flow rate, A is the area of opening and V is the velocity. The velocity is directly related to h of water depth. Therefore, one skilled in the art cannot make and/or use the invention as claimed. It is not clear how

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the baffle sizing or configuration allows the discharge rate to be independent of the water depth. The discharge rate is $Q=AV$, wherein A is the area of opening and V is the velocity.

7. Claim 13 calls for the discharge riser to having openings sized or position such that a discharge flow rate through a outlet remains substantially independent of the water depth. The specification clearly fails to enable one skilled in the art to make and/or use the invention as claimed. How is the flow rate independent of the water depth? This is contrary to fluid mechanics. For example, $Q = AV$, wherein Q is the flow rate, A is the area of opening and V is the velocity. The velocity is directly related to h of the water depth. Therefore, one skilled in the art cannot make and/or use the invention as claimed. It is unclear how to make and/or use a discharge riser having openings sized or positioned such that a discharge flow rate through an outlet remains substantially independent of the water depth.

Allowable Subject Matter

8. Claims 4,5,7,11 are allowed.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sunil Singh whose telephone number is (571) 272-7051. The examiner can normally be reached on Monday through Friday 10:30 AM - 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sunil Singh/
Primary Examiner, Art Unit 3672

Sunil Singh
Primary Examiner
Art Unit 3672

SS
3/10/10